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# Frequently Asked Questions About Lead Exposure

WHAT IS LEAD?
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Lead is a naturally occurring bluish-gray metal having no special taste or smell. It is found in small amounts in the earth's crust and in all parts of our environment. Most lead in the environment comes from human activities like mining, manufacturing, and the burning of fossil fuels. Lead has many different uses, including the production of batteries, ammunition, metal products such as solder and pipes, roofing materials, and devices to shield x-rays.

WHAT HAPPENS TO LEAD WHEN IT ENTERS THE ENVIRONMENT?

Lead stays for a long time in the environment. When released to the air from industry, from the burning of fossil fuels, or from waste, the lead will stay suspended for about ten days. Lead itself does not break down, but sunlight, air, and water can change lead compounds. Most of the lead in soil comes from particles falling out of the air. City soils can also contain lead from landfills and leaded paint. Lead sticks to soil particles. Because of this, it does not easily move into underground water sources unless the water is acidic or "soft". Due to health concerns, lead from gasoline, paints and ceramic products, caulking, and pipe solder has been dramatically reduced in recent years.

**HOW DOES EXPOSURE TO LEAD OCCUR?** 

- Breathing workplace air in lead smelting, refining, and manufacturing industries
- Eating lead-based paint chips (common for children)
- Drinking water that comes from lead pipes or lead soldered fittings
- Breathing or ingesting contaminated soil, dust, air, or water near waste sites
- Breathing tobacco smoke
- Eating contaminated food grown on soil containing lead or food covered with lead-containing dust
- Breathing fumes or ingesting lead from hobbies that use lead (leaded-glass, ceramics, firing weapons)

## **HOW CAN LEAD AFFECT MY HEALTH?**

Lead can affect almost every organ and system in your body. It damages the central nervous system, kidneys and immune system. Health effects are the same whether it is breathed or swallowed.

Exposure to lead is more dangerous for young and unborn children. Harmful effects include premature births, smaller babies, decreased mental ability in infants, learning difficulties, and reduced growth in young children. These effects are more common after

exposure to high levels of lead.

In adults high lead levels may decrease reaction time, cause weakness in fingers, wrists, or ankles, memory loss, inability to concentrate or sleep, and confusion. Lead may cause anemia, a disorder of the blood. Abdominal pain is also seen with exposure to lead. It can cause abortion and may possibly damage the male reproductive system. The health effects of exposure to low levels of lead are uncertain. There is inadequate evidence to clearly determine if lead causes cancer in humans.

## HOW CAN I ELIMINATE OR REDUCE MY EXPOSURE LEAD?

### DO-

- Practice good hygiene and sanitation; wash hands and face whenever possible, to avoid hand-tomouth transfer of lead.
- Clean up paint chips to prevent children from swallowing them.
- Wash your face and hands and change clothing after firing at an indoor range.
- Avoid inhaling smoke from range fires.
- Wear gloves when cleaning or servicing lead?acid batteries, or when handling vehicle wheel weights.
- Dispose of lead?containing waste (batteries, expended brass, paint dust) properly and safely.
- Use Personal Protective Equipment when welding, metal cutting, spray painting, paint stripping, or repairing equipment using solder.

### DON'T-

- Eat, drink, or smoke during weapons firing, weapons cleaning, or when servicing lead acid batteries.
- Use paint intended for use on vehicles, equipment, or ammunition on facilities.
- Burn painted wood.
- Inhale fumes from spray paint.
- Collect expended brass in your hat or helmet or handle expended small arms bullets.
- Melt bullets to obtain lead for hobby purposes.
- Abandon, bury, or burn ammunition.
- Heat rations in metal food cans soldered with lead.